

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-35 (canceled)

Claim 36 (currently amended): A method for a player to play a casino bonus game comprising:

randomly displaying on a display in the casino bonus game a compound hidden pattern, the compound hidden pattern uncovered with a minimum number of player inputs based on optimum strategy,

receiving the player inputs from the player during play of the casino bonus game to uncover the compound hidden pattern, the received inputs from the player limited to a given number,

after each received input, displaying whether all or a part of the compound hidden pattern is uncovered,

based on the part of the compound hidden pattern displayed of the aforesaid display, using strategy by the player to provide the next player input,

awarding an amount to the player based on the number of received inputs used to uncover the compound hidden pattern, the largest amount awarded to the player occurring with the least minimum number of received inputs from the player using said optimal strategy to uncover the compound hidden pattern, the smallest amount awarded to the player occurring with the given number of received inputs from the player to uncover the compound hidden pattern,

ending the casino bonus game in response to awarding the amount.

Claim 37 (previously presented): The method of claim 36 wherein the compound hidden pattern comprises a plurality of individual hidden patterns.

Claim 38 (currently amended): The method of claim 37 wherein a received player input from said player inputs from the player on a portion of one of the plurality of individual hidden patterns uncovers the entire aforesaid one hidden pattern.

Claim 39 (previously presented): The method of claim 36 wherein the largest amount awarded is a progressive jackpot.

Claim 40 (previously presented): The method of claim 36 wherein the amount awarded is a free game.

Claim 41 (currently amended): A method for a player to play a casino game comprising:

randomly displaying on a display in the casino game a compound hidden pattern, the compound hidden pattern uncovered with a minimum number of player inputs based on optimum strategy,

receiving the player inputs from the player during play of the casino game to uncover the compound hidden pattern, the received inputs from the player limited to a given number,

after each received input, displaying whether all or a part of the compound hidden pattern is uncovered,

based on the part of the compound hidden pattern displayed of the aforesaid display, using strategy by the player to provide the next player input,

awarding an amount to the player in a range of amounts, the largest amount in the range awarded when the least minimum number of received inputs from the player uncovers [[a]] the compound hidden pattern, the smallest amount in the range awarded when the given number of received inputs from the player uncovers the compound hidden pattern. pattern, the player with optimum strategy uncovering the compound hidden pattern using the least number of received inputs.

Claim 42 (previously presented): The method of claim 41 wherein the largest amount is a progressive jackpot.

Claim 43 (previously presented): The method of claim 41 wherein the amount awarded is a free game.

Claim 44 (canceled)

Claim 45 (previously presented): The method of claim 41 further comprising: awarding the player when entering play of the casino game from another casino game.

Claim 46 (previously presented): The method of claim 41 further comprising: ending the casino game when the given number of received player inputs occurs without the player uncovers the compound hidden pattern.

Claim 47 (currently amended): The method of claim 41 further comprising: entering play of the casino game from a gaming machine before receiving player inputs from the player.

Claim 48 (previously presented): The method of claim 41 further comprising: entering play of the casino game from another casino game.

Claim 49 (previously presented): The casino game of claim 41 further comprising: playing another casino game only when the compound hidden pattern is uncovered by the player in the casino game.

Claim 50 (previously presented): The method of claim 49 further comprising: always awarding the player in the play of the other casino game.

Claim 51 (previously presented): The method of claim 49 further comprising: ending the casino game after play of the other casino game ends.

Claim 52 (currently amended): A strategy-based casino bonus game method for a player of a gaming machine comprising:

entering the strategy-based casino bonus game from the underlying casino game, playing the strategy-based bonus game in at most a given number of player inputs,

prior to receiving a next player input, displaying whether a successful game result is obtained in the strategy-based casino game for a prior player input,

awarding the player for each successful game result during play of the strategy-based bonus game, play of the strategy-based casino bonus game having an overall game solution with a least number of received inputs when the player uses optimal strategy,

ending the strategy-based bonus game when the given number of player inputs have occurred without obtaining an overall game solution,

awarding the player based on the number of player inputs used to obtain the overall game solution.

Claim 53 (previously presented): The method of claim 52 further comprising:

awarding the player when entering the casino bonus game.

Claim 54 (previously presented): The method of claim 52 in which awarding the player when the overall game result is obtained further comprises:

playing a game,

awarding the player in the game.

Claim 55 (currently amended): A casino bonus game method for a player of a gaming machine comprising:

entering the casino bonus game from the underlying casino game, the casino bonus game having a solution,

awarding the player when entering the casino bonus game,

playing a strategy-based bonus game in a given number of player inputs,

prior to receiving a next player input, displaying whether a successful game result is obtained in the strategy-based casino game for a prior player input,

awarding the player for obtaining the solution during play of the strategy-based bonus game, play of the strategy-based casino bonus game having an overall game solution with a least number of received inputs when the player uses optimal strategy,

ending the strategy-based bonus game when the given number of player inputs have occurred without obtaining the solution,

playing a second game when the solution is obtained by the player in the strategy-based bonus game.

Claim 56 (previously presented): The method of claim 55 further comprising:

awarding the player based on the number of player inputs used to obtain the solution.

Claim 57 (previously presented): The method of claim 56 wherein the solution comprises a plurality of individual hidden patterns.

Claim 58 (previously presented): The method of claim 57 further comprises awarding the player for uncovering each individual hidden pattern.